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2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A						

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GRUPPE UNIT   C-3274 Table Top Processor

NAME   INSTALLATION INSTRUCTION
3274-K100-V002

GEZ DESIGNER Hötzendorfer   ERSETZT DURCH SUP'SD BY

GEPR. CHKR.   ERSATZ FÜR SUPERSEDES

SEITE PAGE 1 OF 21

DATUM DATE 7.81   017-0025594

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PURPOSE

The purpose of this document is to specify the individual steps for installing the K 100 in connection with K 154 or K 180 or K 181 or K 183.

The KIT 3274 - K 100 - V 002 contains all specify part's for install the four Kits

            3250-K 154 (M 250-07-STD) *
            3250-K 180 (M 250-45-STD)
            3250-K 181 (M 250-05-STD)
            3250-K 183 (M 250-06-STD)

in the C-3274.

This Kit comprises of on Cable for connecting the Adapter M 250-05-STD with an LED in the Front Panel.

The "DATA SET READY" (LED) status is demanded by the German Federal Post.

Additional Parts

The following parts must be ordered seperately:

- Communication Cable
- Modem
- K 154 or K 180 or K 181 or K 183
- Insulating Tape

The following Modems are not tested with 9010. Augsburg QA must be notified before Installation.

- Modem BELL 201C
- Modem BELL 208C
- Pin for Pin compatible Modem
  or a V Modem

* Please note that for installing this DLC Inhouse Communication Kit besides the present Installation Instruction the NCR/DLC Installation Guidelines have to be considered.

PARTS LIST

The parts included in the Kit C-3274 - K 100 - V 002
are specified in the Parts List 603 - 6091195

PROCEDURE

1. Disassembling

1.1 Switch the power switch located at the control panel of
    the C-3274 unit to its OFF position.

1.2 If the Memory Support Subsystem is installed, switch the
    respective switch located at the rear side of the unit to
    its OFF position.

1.3 Remove the power plug from the wall socket.

1.4 Loosen the screws at the back wall
    of the C-3274 cabinet.

1.5 Remove the C-3274 cabinet top.

2. Assembling-LED wiring for M 250-05-STD only

2.1 Take the Communication Indication Cable 017-0025135
    (Item 1) and connect its one end with the Pin Socket
    I 1 of the PC-Board M 250-05-STD.

2.2 Lay the Cable to the front panel as shown in Figure 1-A.

2.3 Connect the free end of the Cable with the pin socket
    P-3 of the front panel PC board see Fig. 1

2.4 Fasten the Cable 017-0025135 at the existing cables and
    at the three holes in the vertical frame plate by means

3. Assembling for all Boards M 250-45/05/06/07-STD

3.1 The Communication Adapter must be strapped per strapping
    list for

    M 250-45-STD-001 Section 6,1
    M 250-05-STD-   6.2
    M 250-06-STD-   6.3
    M 250-07-STD-   6.4

3.2 The adapter can be installed in slot 8 or 9.

3.3 For Cable mounting   1120-C001
                          1313-C001
                          1401-C081
                          1308-C004
              and   1308-C005 continue with paragraph 3.4.

   For Cable mounting   1401-C093
                        1401-C094
              see item D in Fig. 1 and continue with paragraph
              3.6

3.4 Remove the Cable-Sheathing from the cable for Details see
    Fig. 1.

3.5 Bend the Shield-Lug (item B in Fig. 1) close to the Cable
    Sheathing and wrap Insulating Tape around.

3.6 If you see that there is no spare position for mounting
    an additional single cable clamp, loosen a cable with
    similar diameter and mount the two cables with a double
    clamp. Continue with paragraph 3.10.

3.7 Put the cable through the bottom of the cabinet from below.

3.8 Using the Cable Clamp, the Cable Clamp Bracket and
    two screws of following table.

Cable	Part List Item		
Number	Clamp	Clamp Bracket	screws
1120 - C001-xxxx	11	2	4
1313 - C001-xxxx	8	2	4
1308 - C004-xxxx	12	2	4
1308 - C005-xxxx	12	2	4
1401 - C094-xxxx	8	2	4
1401 - C093-xxxx	3	2	4
1401 - C081-xxxx	3	2	4

3.9 Fix the Clamp Bracket on to the Cabinet by means of the
    screws (items).

    Continue with paragraph 3.12.

3.10 For Double Clamp put the cable through the bottom of the cabinet from below. Fix the Clamp Bracket (item 2) on to the two cables by means of the screw (item 10).

3.11 Fix the Clamp Bracket on to the Cabinet by means of the two screws (item 5).

3.12 Attached the M250-XX connector of the Cable to the Pin Socket of the M250-XX Adapter Board.

```
M250-45-STD-000  Pin Socket J2
M250-45-STD-001  Pin Socket J1
M250-05-STD      Pin Socket J2
M250-06-STD      Pin Socket J2
M250-07-STD      Pin Socket J1
```

3.13 Replace and fasten top cabinet.

4.0 Power-up and Check-out

4.1 Put the power plug into the wall socket.

4.2 Switch the Non-Volatile Memory Switch (see disassembling step 1,2) to its on position.

4.3 Run Communication Diagnostic to check the proper operation of the system.

```
Level 1 Diagnostic

M250-45    Diagnostic M25045 DP
M250-05               M25005 DP
M250-06               MCSDLC
M250-07               MCSDLC
```

4.4 Update the Field Print Package.

4.5 Attach the change level label to the change level record card.

5.0 Packing Instructions

5.1 Attach 1 label 017-0025611 to the packing container.

5.2 Put installation instructions 017-0025494 and parts list 603-6091195 and 1 label 017-0025611 into bag V00-0010598.

5.3 Put screws, clamps and brackets into bag H00-0001347.

5.4 Put the Attention Sheet 017-0025676 above the front sheet of the Installation Instruction.
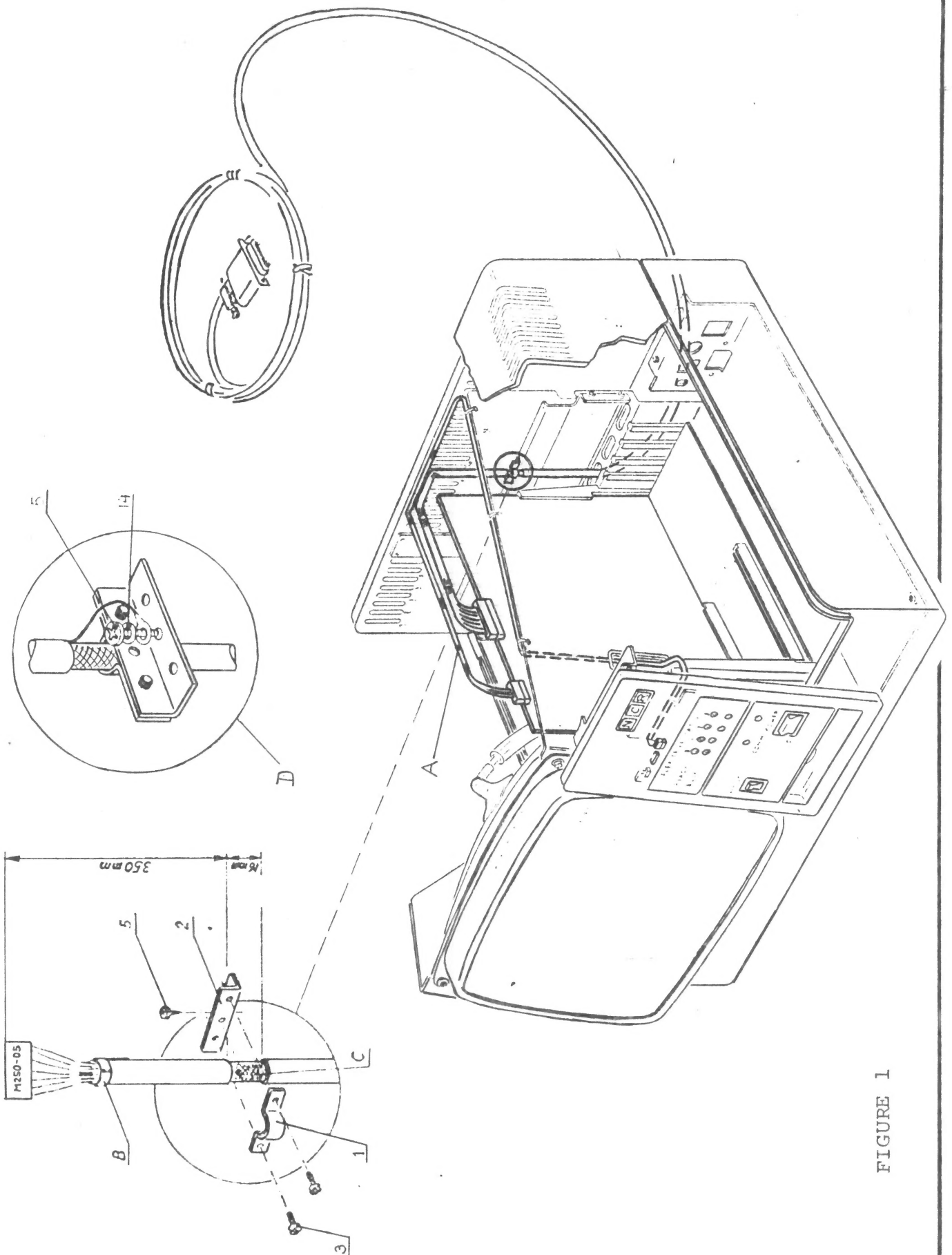
FIGURE 1

6.1   Header Strapping M250-45-STD-001

Bus Master Selection

Master Select 5 J4-203 to J4-205
J4-203 to J4-205 is a strap in artwork.

Poll Request Selection

PREQ5

J5-104 to J5-203

Service Request Priority Assignment

for first board (D2)   J5-115 to J5-103
for second board(D0)   J5-117 to J5-103

Board Selection J4

for first board (FF00) J4-109 to J4-107 to J4-210
                J4-106 to J4-108 to J4-110 to J4-209

for second board (FF20) J4-106 to J4-108 to J4-209
                J4-107 to J4-109 to J4-110 to J4-210

Clock Selection

Internal Clock J2-110 to J2-108 to J2-109

Header Strapping M 250-45-STD-001
Status 3 reside on socket J3

A through-connection between the following pins will turn on or
turn off the particular bit.

BIT	ON	OFF
	205 TO	105 TO
D0	201	201
D1	101	101
D2	202	202
D3	102	102
D4	203	203
D5	103	103
D6	204	204
D7	104	104

D0, D6 and D7 have to be strapped
according to the requirements of the
external unit.

The required strapping for Status 3 is defined below:

D0 must be ON if Asynchronous Operation is at a Bitrate of 1800
bps or less.
D1 must be ON in all cases
D2 must be OFF in all cases
D3 must be OFF in all cases
D4 must be OFF in all cases
D5 must be OFF in all cases
D6 must be ON if a stop element with 1 unit or 2 unit lenght is
required.
D7 must be ON if a stop element with 1,5 unit or 2 unit length is
required.

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STRAPPING FIELD J2

OPERATION	ASYNCHRONOUS (WITH OR WITHOUT MODEM)												SYNCH (MODEMLESS)		
BIT RATE	75	110	134.5	150	200	300	600	1200	1800	2400	4800	9600	2400	4800	9600
NOTE 1	64	64	64	64	64	64	64	64	64	16	16	16	1	1	1
106 (NOTE 2)	102 103 104 105 201 203 204 205	102 104 204 205	102 103 104 203 205	105 205	103 105 203 204	104 105 204	103 104 105 203	102 103 104 105 201 X	102 103 104 105 203 204	103 104 105 203	102 103 104 105 201 X	102 103 104 105 205	102	102	105 205
206	103 104 105 201 203 204 205	103 105 201 203	105 201 204	102 103 104 201 203 204	102 104 201 205	102 103 201 203 205	102 201 204 205	203 204 205	201 205	102 201 204 205	203 204 205	203 204	103 104 105 201 203 204 205	103 104 105 201 203 204 205	102 103 104 201 203 204
101												201			
107	207	207	207	207	207	207	207	207	207	207	207	207	207	207	207

NOTES :
1. Selection of -64- or -16- as Baud Rate Factor is controlled by bits D0 and D1 in Function 1. The Baud Rate Factor is always -1- during synchronous operation.

2. Connect pins 106, 206, 101 and 107 with the pins mentioned in the column for the desired Bit Rate and type of Operation.

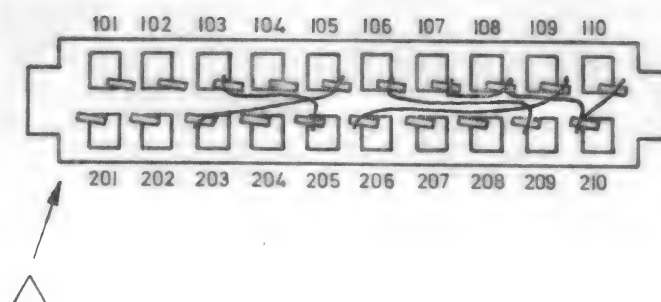3. By strapping 207 to 107, this allows software to select Bit Rate or Bit Rate/2.

6.2   Header Strapping M250-05-STD
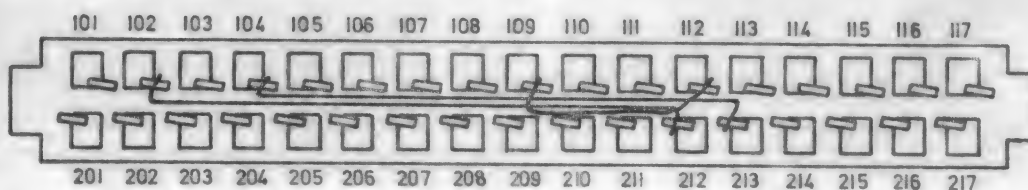
   Figure 1:   Header Location
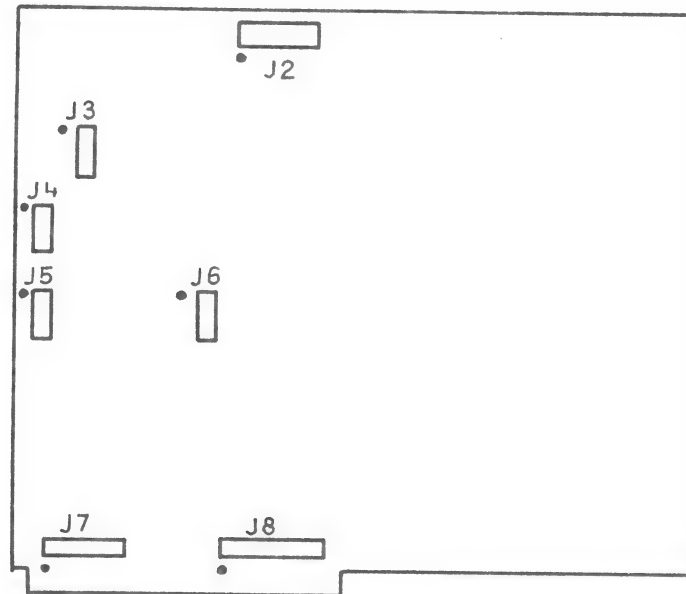
Indicates Pin 201

Figure 2:   Header Strappings J7

HEADER	LOCATION	STRAPPING	SIGNAL
MASTER SELECT & BOARD SELECT (Wire Wrap)	J7	203 to 105	MIDD5/ to CMID/
		103 to 205	MIDD6/ to DMID/
		110 to 210	AS5 to Pull up
		209 to 106	AS6 to GND
		108 to 210	AS7 to Pull up
		107 to 108	AS8 to Pull up
		109 to 206	AS9 to GND

Header Strapping M250-05-STD

J8

POLL REQUEST	J8	213 to 104	PREQC. FA/ to PREQ5/
(Wire Wrap)		212 to 102	PREQO FA/ to PREQ6/
		113 to 114	CISR/ to D3/
		112 to 109	DISR/ to D6/
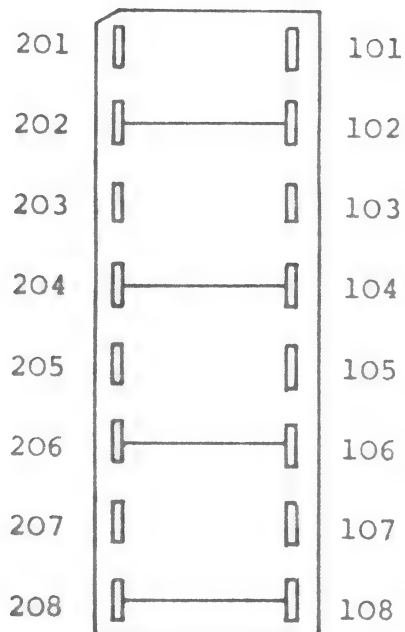
J3
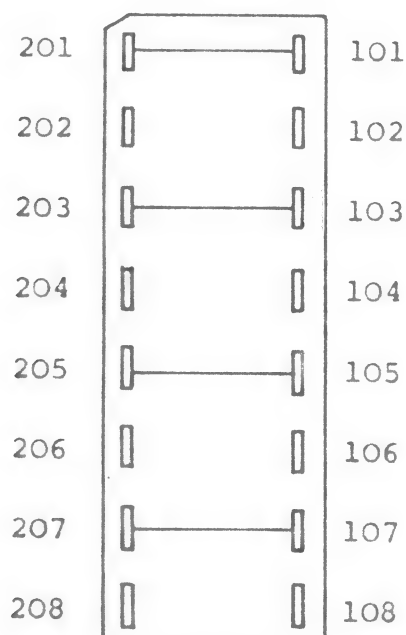
J4

OPERATOR INTERFACE	J3	102 to 202	WIN/ to WINST/
		104 to 204	SPARED/
		106 to 206	DSRS to DSRST
		108 to 208	DTRST/ to DTR. LAA/
RAPPING BYTE 1	J4	101 to 201	DO
		103 to 203	D2
		105 to 205	D4
		107 to 207	D6

Header Strapping   M250-05-STD
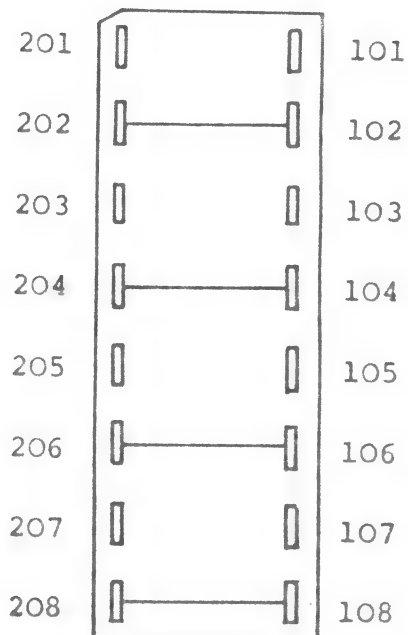
J5
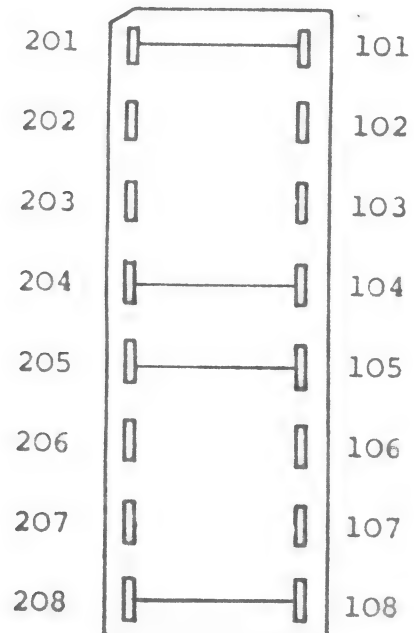
J6

STRAPPING BYTE 2	J5	102 to 202	D1
		104 to 204	D3
		106 to 206	D5
		108 to 208	D7
CLOCK SELECTION & DMA I.D.	J6	101 to 201	RSET/ to RXC/
		104 to 204	TSET/ to TXC/
		105 to 205	DID6 to GND
		108 to 208	DIDOS to GND

6.3.0 Header Strapping M 250-06-STD

6.3.1 TABLE 1.

MODEM INTEGRATED	J1	NO CONNECTION	
MODEM EXTERNAL	J1	101 to 201	RECNRZI to GND
		102 to 202	TXNRZI to GND
		103 to 203	GND to MODEM
2400 BPS CLOCK GENERATION	J4	206 to 105	LOW FREQUENCIES
		205 to 106	
		202 to 109	C1K2 to F6
		109 to 208	F6 to CLK1
DTR/RTS	J5	101 to 201	DTR to DTR.L/
		104 to 204	RTS to RTS.L/
DSR/CO/DRS	J6	201 to 202	DRS to DRS.L/
		203 to 102	CO.V/ to CO/
		205 to 104	DSR.V/ to DSR/
Comm. Address	J7	See Table 2	
DMA COMM #1 0&1	J8	103 to 104	ADID 2 to ADID 1
		104 to 105	ADID 1 to ADID 3
		105 to 205	ADID 3 to GND

TABLE 1. HEADER STRAPPING

HEADER	LOCATION	STRAPPING	SIGNALS
MASTER SELECT	J9	203 to 205	MASTER 5 to MSEI CCM
		103 to 105	MASTER 6 to MSEL DMA
BOARD SELECT COMM #1 FD20	J9	107 to 210	BAD8 to BAD5
		110 to 210	BAD5 to PULLUP
		206 to 108	GND to BAD7
		108 to 209	BAD7 to BAD6
		109 to 209	BAD9 to BAD6
POLL REQUEST	J10	102 to 203	PREQ6/ to DPREQ
		103 to 104	CPREQ to PREQ5/
SERVICE REQUEST CCDLC #1 0&1 DSR	J10	112 to 213	DSRT to ISR/
1 DSR		213 to 116	ISR/ to DI/
		212 to 117	DSRR/ to DO/

Header Strapping M 250-06-STD

Table 2 COMMUNICATIONS ADDRESS HEADER J7

AD0/	J7-101	J7-105 Ground
AD1/	J7-102	J7-205 Pulup
AD2/	J7-103	J7-205
AD3/	J7-104	J7-205
AD4/	J7-204	J7-205
AD5/	J7-203	J7-205
AD6/	J7-202	J7-205
AD7/	J7-201	J7-205

Each Secondary Station in a DLC System is assigned a
Communication ADDRESS. Strap this ADDRESS by correcting
the ADDRESS bits ADX/ to Ground for a ONE and to
pull-up for a ZERO. The example in Table 1 shows
strapping for secondary ADDRESS 01.

6.3.2 Header Positions M 250-06-STD
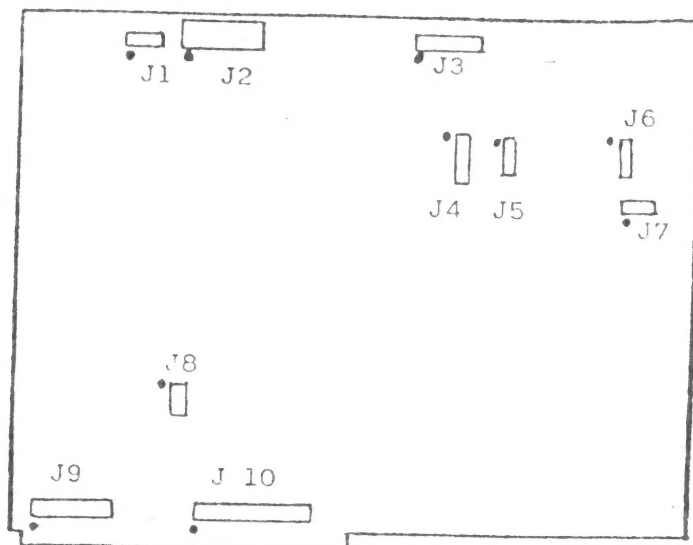
• Indicates Pin 201
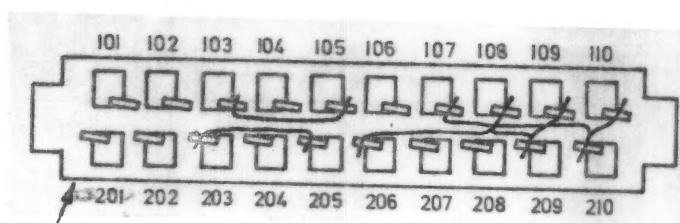
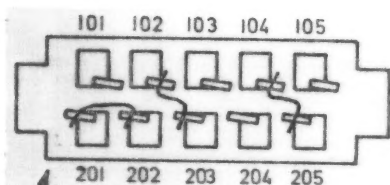J9   20 PIN
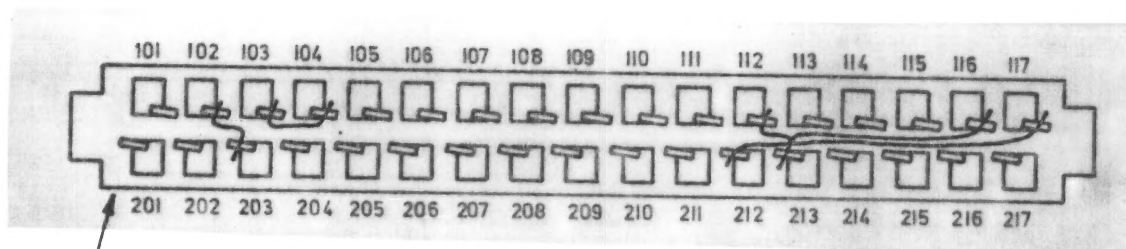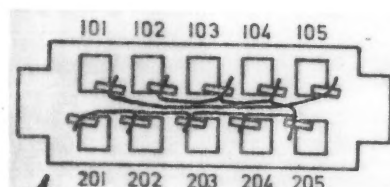

J10   34 PIN
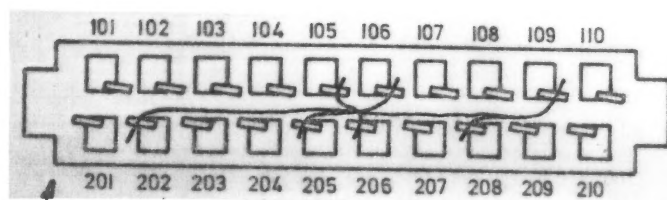
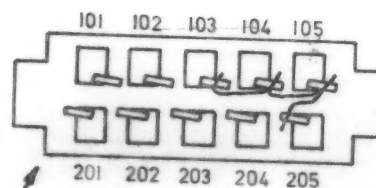Header Strapping M 250-06-STD
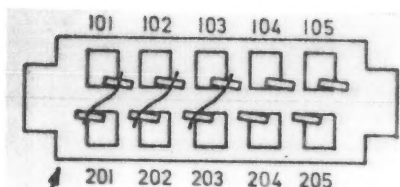
J1 MODEM
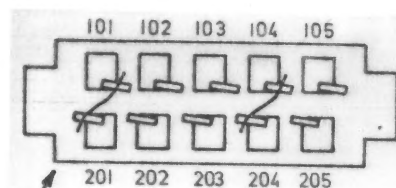
J5 LINE OPTION STRAPPING

J6 LINE OPTION STRAPPING

J7 COMMUNICATION ADDRESS
(see table 2)

J4   2400 BPS
CLOCK GENERATION

COMM # 1 0&1
J8 DMA CHANNEL
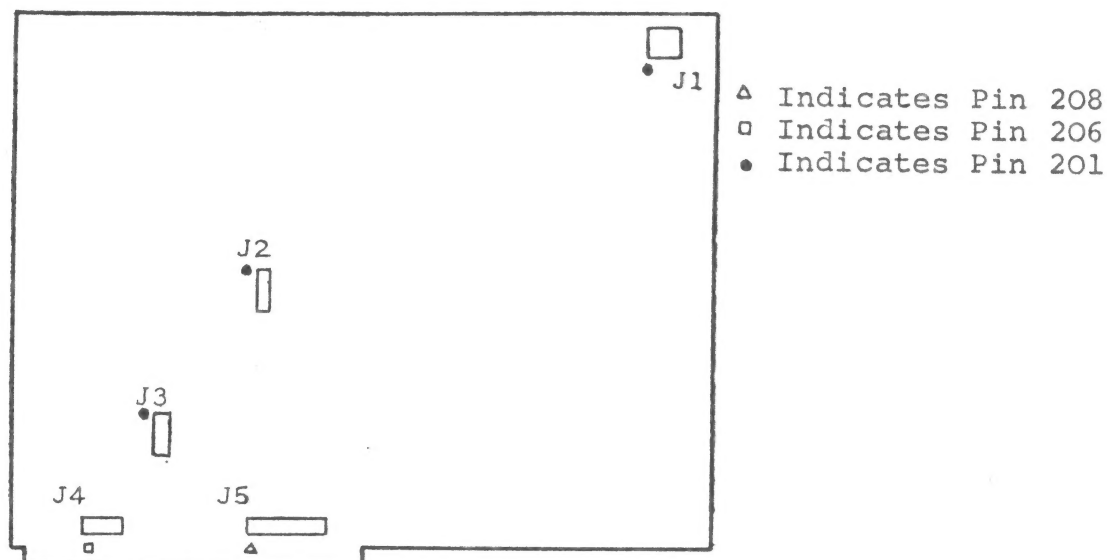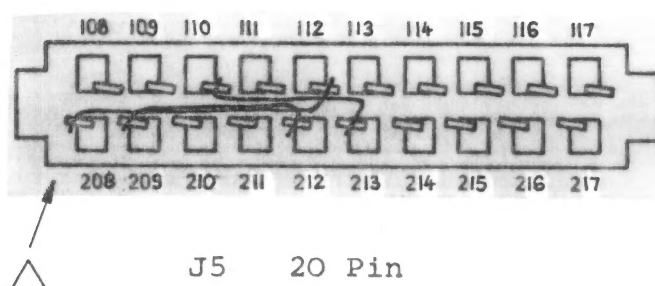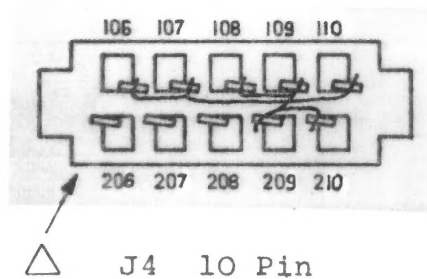
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6.4   Header Strapping   M250-07-STD

△ Indicates Pin 208
□ Indicates Pin 206
● Indicates Pin 201

J1

J2

J3

J4   J5

FIGURE 1:   M250-07-STD HEADER POSITIONS

101 102 103 104 105

201 202 203 204 205

△   J3

COMM #1   14&15

106 107 108 109 110

206 207 208 209 210

△   J4   10 Pin

108 109 110 111 112 113 114 115 116 117

208 209 210 211 212 213 214 215 216 217

△   J5   20 Pin

HEADER	LOCATION	STRAPPING	SIGNALS
		Table 1. Header Strapping	
COMMUNICATION ADDRESS	J2	NOT REQUIRED	
DMA CHANNEL COMM #1	J3	204 to 103 103 to 104 104 to 105	PULLUP to ADID2 ADID2 to ADID1 ADID1 to ADID3
BOARD SELECT COMM #1 FECO	J4	209 to 210 106 to 107 107 to 110 108 to 109 109 to 209	BAD6 to +5V GND to BAD8 BAD8 to BAD5 BAD7 to BAD9 BAD9 to BAD6
SERVICE REQUEST CCDIC #1 14&15 DSR 5 ISR	J5	110 to 213 112 to 208 212 to 209	D5/ to ISR/ DSRT/ to D15/ DSSR/ to D14/